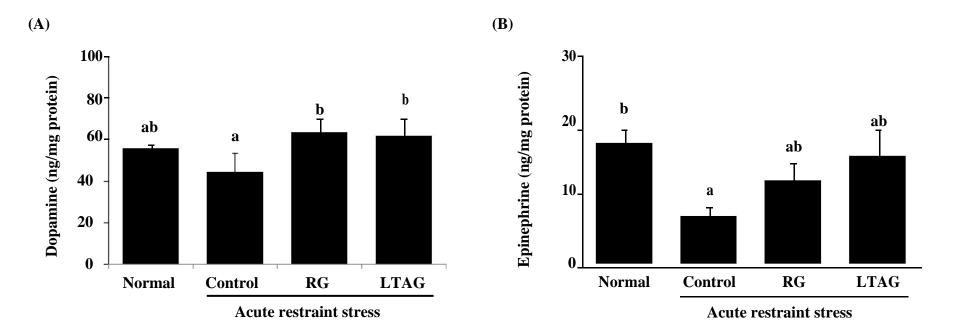
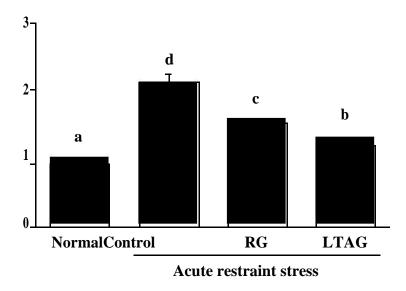


**Supplementary Fig. 1.** Effect of LTAG on corticotrophin releasing factor (CRF) (A) and adrenocorticotrophic hormone (ACTH) (B) levels in acute restraint stress mice. Mice were immobilized for a further 1 h after administration of RG or LTAG (500 mg/kg, p.o.). Data represent mean  $\pm$  SEM. Values expressed by different letters are significantly different at p < 0.05. RG, raw garlic; LTAG, low -temperature aged garlic.



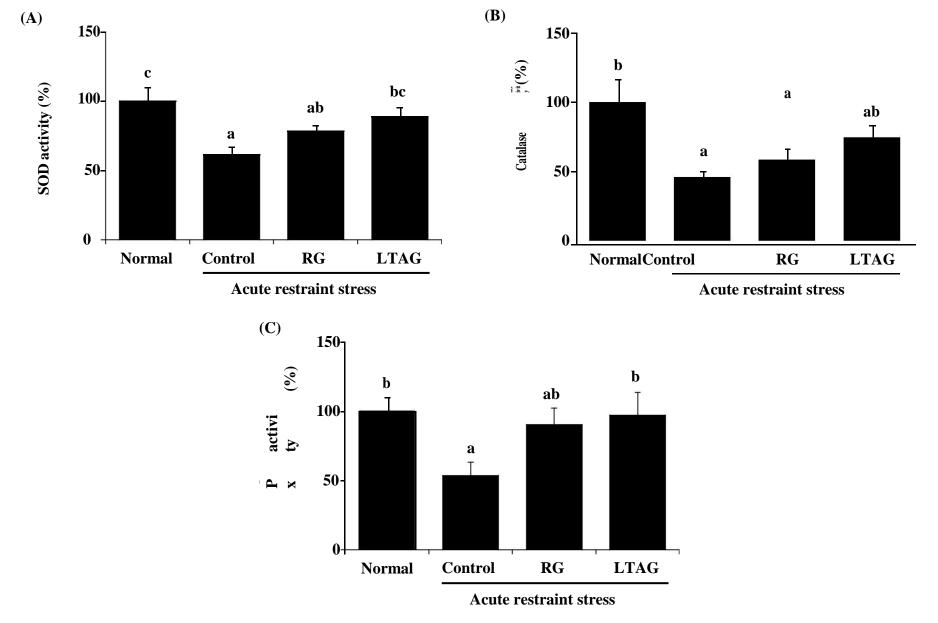
**Supplementary Fig. 2.** Effect of LTAG on dopamine (A) and epinephrine (B) levels in acute restraint stress mice. Mice were immobilized for a further 1 h after administration of RG or LTAG (500 mg/kg, p.o.). Data represent mean  $\pm$  SEM. Values expressed by different letters are significantly different at p < 0.05. RG, raw garlic; LTAG, low-temperature aged garlic.

Supplementary Fig. 3.



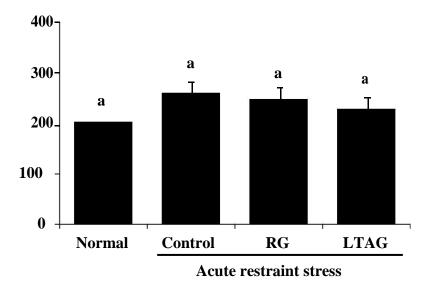
**Supplementary Fig. 3.** Effects of LTAG on ROS levels in brain tissue of acute restraint stress mice. Mice were immobilized for a further 1 h after administration of RG or LTAG (500 mg/kg, p.o.). Data represent mean  $\pm$  SEM. Values expressed by different letters are significantly different at p < 0.05. RG, raw garlic; LTAG, low-temperature aged garlic.

Supplementary Fig. 4.



**Supplementary Fig. 4.** Effect of LTAG on brain SOD (A), catalase (B), and GPx (C) activities of acute restraint stress mice. Mice were immobilized for a further 1 h after administration of RG or LTAG (500 mg/kg, p.o.). Data represent mean  $\pm$  SEM. Values expressed by different letters are significantly different at p < 0.05. RG, raw garlic; LTAG, low-temperature aged garlic.

Supplementary Fig. 5.



**Supplementary Fig. 5.** Effect of LTAG on blood sugar levels of acute restraint stress mice. Mice were immobilized for a further 1 h after administration of RG or LTAG (500 mg/kg, p.o.). Data represent mean  $\pm$  SEM. Values expressed by different letters are significantly different at p < 0.05. RG, raw garlic; LTAG, low-temperature aged garlic.

## **Supplementary Methods**

# Plasma corticotropin-releasing factor (CRF) and adrenocorticotropic hormone (ACTH) levels

Plasma CRF and ACTH were estimated according to the manufacturer's instructions (Cusabio technology. LLC. Houston, TX, USA). The results are expressed as pg/mL or ng/mL.

## Dopamine and epinephrine levels in brain tissue

Dopamine and epinephrine were determined in the homogenates of brain using an ELISA kit according to the manufacturer's instructions (Cusabio). The results are expressed as ng/mg protein.

## Measurement of reactive oxygen species (ROS) levels

CM-H<sub>2</sub>DCFDA (Abcam, Cambridge, MA, USA) was used in the measurement of ROS production. Briefly, the brain tissue was washed twice with PBS and then homogenized in a lysis buffer. After centrifugation at 12,000 rpm for 10 min, the supernatants were collected and incubated with CM-H<sub>2</sub>DCFDA for 30 min and rinsed; fluorescence was measured with a microplate reader (Molecular Devices, Sunnyvale, CA, USA).

#### Antioxidant enzyme activities in brain tissue

Superoxide dismutase (SOD), catalase (CAT), and glutathione peroxidase (GPx) activities were determined in the brain homogenates an

ELISA kit according to the manufacturer's instructions (BioVision, Inc., Milpitas, CA, USA).

# **Blood sugar analysis**

One hour after the acute restraint stress, mice were euthanized with CO<sub>2</sub>. Blood samples were collected from abdominal aorta with heparinized syringes. The blood sugar level was measured with a glucose analyzer (Accu-chek Performa, Roche Ltd., Basel, Switzerland).